Amendments to the Claims:

In the claims:

1– 20. (canceled)

21. (currently amended) A method of diagnosing a sterile inflammatory disease, autoimmune disorder, immunodeficiency disease, cancer, or GVHD in a subject, comprising the steps of :

preparing a first gene expression profile of <u>at least five genes of</u> a T lymphocyte population from the subject;

comparing the first gene expression profile to at least one second gene expression profile from a T lymphocyte population from a subject having a sterile inflammatory disease, autoimmune disorder, immunodeficiency disease, cancer, or GVHD and to a third gene expression profile of a normal T lymphocyte population; and <u>thereby</u> determining if the subject has a sterile inflammatory disease, autoimmune disorder, immunodeficiency disease, cancer, or GVHD.

22 – 33. (canceled)

34. (previously presented) The method of claim 21, wherein the T lymphocyte population is selected from the group consisting of a population of THI cells, TH2 cells, TDTH cells, TCTL cells, Ts cells, memory T lymphocytes, effector T lymphocytes, pre-T lymphocytes, cortical T lymphocytes, medullary T lymphocytes, peripheral T lymphocytes, neoplastic cells, LAK cells, and TIL cells.

35. (canceled)

36. (canceled)

37. (previously presented) The method of claim 21, wherein the gene expression profile comprises the expression levels of at least about 10 genes.

38. (previously presented) The method of claim 21, wherein the gene expression profile comprises the expression levels of at least about 50 genes.

39. (previously presented) The method of claim 21, wherein the gene expression profile comprises the expression levels of at least about 100 genes.

40. (previously presented) The method of claim 21, wherein the gene expression profile comprises the expression levels of at least about 500 genes.

41. (previously presented) The method of claim 21, wherein the gene expression profile comprises the expression levels of at least about 1000 genes.

42. (previously presented) The method of claim 21, wherein the gene expression profile is created by measuring hybridization of nucleic acid molecules to nucleic acid molecules affixed to a solid support.

43. (previously presented) The method of claim 42, wherein the solid support comprises a representative grouping of nucleic acid molecules corresponding to genes from T lymphocytes whose expression levels are modulated in sterile inflammatory disease, an autoimmune disorder, an immunodeficiency disease, cancer, or GVHD.

44. (previously presented) The method of claim 21, wherein the sterile inflammatory disease is selected from the group consisting of: psoriasis, rheumatoid arthritis, glomerulonephritis, asthma, allergic rhinitis, cardiac and renal reperfusion injury, thrombosis, adult respiratory distress syndrome, inflammatory bowel disease, ulcerative colitis, and periodontal disease.

45. (previously presented) The method of claim 21, wherein the autoimmune disorder or immunodeficiency disease is selected from the group consisting of: rheumatoid arthritis, spondyloarthropathies, systemic lupus erythematosus, HIV-1, polymyositis, inclusion body myositis, SCIDs, Wiskott-Aldrich syndrome, Swiss-type agammaglobulinemia, thymic alymphoplasia, Ataxia Telangiectasia, bare lymphocyte syndrome, immune

deficiency with thymoma, transient hypogammaglobulinemia of infancy, DiGeorge's syndrome, Nezelof's syndrome, autosomal recessive lymphopenia with normal or abnormal immunoglobulins, Omenn's syndrome, and idiopathic CD4+ lymphocytopenia.

46. (previously presented) The method of claim 21, wherein the cancer is selected from the group consisting of: precursor T-lymphoblastic lymphoma/leukemia, T lymphocyte chronic lymphocytic leukemia/prolymphocytic leukemia, T lymphocyte type large granular lymphocyte leukemia, Mycosis fungoides/Sezary syndrome, unspecified peripheral T lymphocyte lymphomas, angioimmunoblastic T lymphocyte lymphoma, nasal type T/NK cell (angiocentric) lymphoma, intestinal T lymphocyte lymphoma with or without associated enteropathy, hepatosplenic $\gamma\delta$T lymphocyte lymphoma, subcutaneous panniculitic T lymphocyte lymphoma, adult T lymphocyte lymphoma/leukemia, anaplastic large cell lymphoma, T lymphocyte hairy cell leukemia, and T lymphocyte chronic lymphocytic leukemia.